

U.S. Application No.: 10/658,793  
Amendment

**Amendments to the Drawings:**

The attached sheets of drawings include changes to Figures 2 and 3. These sheets replace previously submitted Figures 2 and 3.

Attachment:

Replacement Sheets for Fig. 2 and 3

Annotated Sheet Showing Changes

**REMARKS**

Claims 22-66 are pending in this application. By this Amendment, the Abstract is amended, replacement and annotated drawings sheets for Figures 2 and 3 are provided and claims 22, 36, 40, 54, 56, 58 and 66 are amended. Claims 1-21 were previously cancelled without prejudice or disclaimer. Reconsideration in view of the above amendments and following remarks is respectfully requested.

Applicants gratefully acknowledge the courtesies extended to Applicants' representatives during the March 23 personal interview. The points discussed during the personal interview are discussed herein.

**I. THE DRAWINGS MEET ALL FORMAL REQUIREMENTS**

The Office Action notes that Figures 2 and 3 were previously marked up, but that replacement sheets have not been submitted. By this Amendment, replacements sheets for Figures 2 and 3 are provided along with annotated sheets showing the changes. Figure 2 was previously amended to change to legend 40 to 90 in order to conform the drawing to the specification. Likewise, in Figure 3, the legend 352 was changed to 382 in order to conform the drawing to the specification. It is respectfully submitted that no new matter is introduced, but that annotated sheet and replacements sheets are provided to reflect these amendments.

**II. THE SPECIFICATION MEETS ALL FORMAL REQUIREMENTS**

The Office Action objects to the specification on the grounds that the Abstract exceeds 150 words and may contain phrases that are implied. By this Amendment, the Abstract is amended. Thus, the withdrawal of objection to specification is respectfully requested.

**III. CLAIMS 22-26, 28-30, 33 and 34 DEFINE PATENTABLE SUBJECT MATTER PURSUANT TO 35 U.S.C § 102**

The Office Action rejects claims 22-26, 28-30, 33 and 34 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,357,758 to Andonian (hereafter "Andonian"). The rejection is respectfully traversed.

To establish a *prima facie* case of anticipation under 35 U.S.C. § 102(b), the reference must teach every aspect of the claimed invention either explicitly or impliedly. Any feature not directly taught must be inherently present. MPEP 2131. Applicant respectfully submits

that this criterion has not been met for Claims 22-39.

Andonian discloses a cryogenic-fluid container wherein a user is delivered breathable oxygen and the cryogenic fluid is designed to simultaneously act to receive heat from the user's surroundings, for use with a body suit. The liquid oxygen tank is pressurized from the additional heat transferring to the liquid oxygen. Andonian is used to provide a primary source of breathable oxygen. Andonian discloses a one-hour rated unit containing 6.5 to 7.0 pounds of liquid oxygen and a two-hour rated unit containing 13 to 14 pounds of liquid oxygen (col. 11, ll. 28-35). Andonian discloses no conserving device.

In contrast, claim 22 recites a conserving device and said portable LOX container being configured to hold about one pound of LOX when fully charged with LOX; and wherein said LOX storage/delivery apparatus can last approximately 10 hours at a typical patient use rate of about 2 liters per minute. Andonian thus fails to disclose these features and operating parameters as recited in claim 22 of Applicants' invention.

Therefore, Andonian does not disclose the invention recited in claim 22. Thus, withdrawal of the rejection of claim 22 under 35 U.S.C. § 102 is respectfully requested.

Further, claims 23-26, 28-30, 33 and 34 depend from claim 22. Thus, it is respectfully submitted that claims these claims are distinguishable over the applied reference for at least those reasons described above in connection with claim 22. Therefore, withdrawal of the rejection of dependant claims 23-26, 28-30, 33 and 34 is respectfully requested.

**IV. CLAIMS 27, 31, 32, 35-66 DEFINE PATENTABLE SUBJECT MATTER PURSUANT TO 35 U.S.C § 103**

The Office Action rejects claims 27, 32, and 36-39 under 35 U.S.C. § 103 as being unpatentable over Andonian. The Office Action also rejects claim 31 under 35 U.S.C. § 103 as being unpatentable over Andonian in view of Leonard (U.S. Patent No. 4,211,086). The Office Action also rejects claims 35, 40-48 and 51-66 under 35 U.S.C. § 103 as being unpatentable over Andonian in view of Todd, Jr. (U.S. Patent No. 6,446,630). The Office Action finally rejects claims 49 and 50 under 35 U.S.C. § 103 as being unpatentable over Andonian/Todd in view of Leonard. These rejections are respectfully traversed.

Claims 27, 32, 36-39 depend from independent claim 22. Since Andonian fails to disclose the invention of claim 22 as described above, it is respectfully submitted that it cannot render obvious dependant claims 27, 32 and 36-39. Thus, withdrawal of the rejection

of claims 27, 32 and 36-39 is respectfully requested.

Likewise, claims 31 and 35 depend from claim 22. With regard to claim 31, it is respectfully submitted that Leonard fails to supply the deficiencies of Andonian, and thus, withdrawal of the rejection of claim 31 under 35 U.S.C. § 103 is respectfully requested. With regard to claim 35, it is respectfully submitted that Todd, Jr. fails to supply the deficiencies of Andonian, and thus, withdrawal of the rejection of claim 35 under 35 U.S.C. § 103 is respectfully requested.

With regard to the rejection of claims 40-48 and 51-66, as the Examiner notes, Andonian does not disclose a conserving device. Andonian uses liquid withdrawal warming coils that run internally and externally of the liquid oxygen container (Fig. 1) such that heat is transferred to the liquid oxygen container to maintain pressurization.

Todd, Jr. discloses the use of a conserving device with an oxygen concentrator or a cylinder. However, Todd, Jr. neither discloses a conserving device integrated into a portable liquid oxygen storage/delivery apparatus nor a conserving device being connected to a demand flow control device.

In contrast, claim 40 recites, said liquid withdrawal warming coil located externally of said portable LOX container and that said conserving device integrated into said LOX storage/delivery apparatus and connected to said demand flow control device.

Therefore, the combination of Andonian and Todd, Jr. does not teach or suggest the invention recited in claim 40. In addition, neither Andonian nor Todd, Jr. provided the requisite motivation to modify and/or combine their teachings in order to arrive at the invention recited in claim 40. Therefore, withdrawal of the rejection of claim 40 under 35 U.S.C. § 103 is respectfully requested.

Further, claims 41-48 and 51-66 depend from claim 40 and are thus distinguishable over the applied references for at least the reasons described above. Therefore, withdrawal of the rejection of these defendant claims is also respectfully requested.

Claims 49 and 50 depend from claim 40. As described above, Andonian and Todd, Jr. fails to teach or suggest the invention of claim 40. Further, Leonard fails to supply the deficiencies of these applied references. Therefore, withdrawal of the rejection of claims 49 and 50 under 35 U.S.C. § 103 is respectfully requested.

**CONCLUSION**

In view of the foregoing, Applicants respectfully submit that this application is in condition for allowance. Favorable reconsideration and prompt allowance are earnestly solicited.

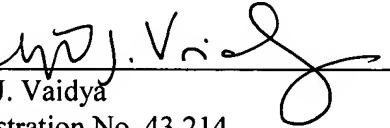
Should the Examiner believe that anything further is desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the Applicants' undersigned representative at the telephone number listed below.

If there are any other fees due in connection with the filing of this response, please charge the fees to our Deposit Account No. 50-1349. If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our Deposit Account.

Respectfully submitted,

Dated: June 13, 2005

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Title: HIGH EFFICIENCY LIQUID  
OXYGEN SYSTEM  
Applicants: Mark FRYE, et al.  
Application No.: 10/658,793  
Attorney Docket: 82058-0013  
ANNOTATED SHEET

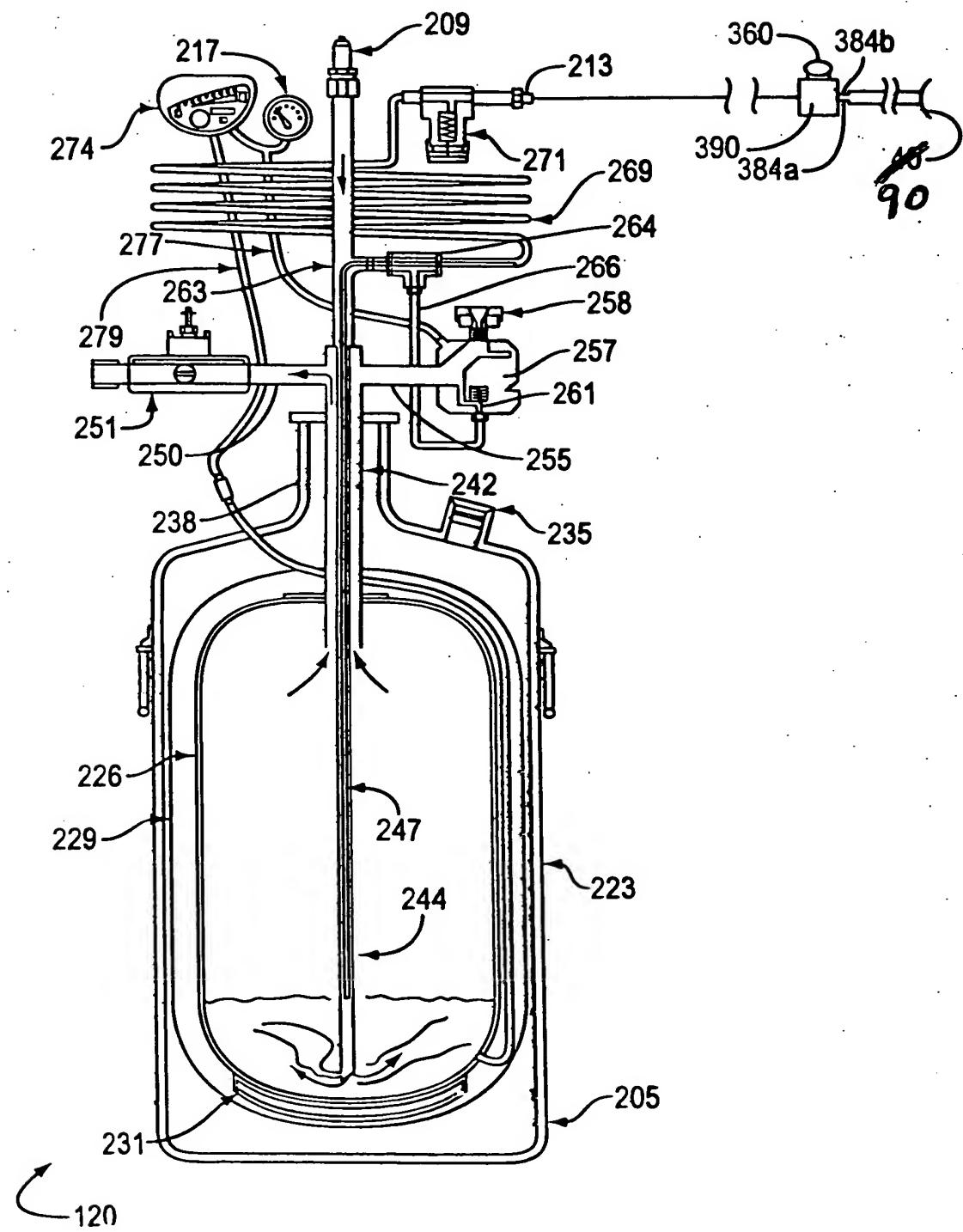


FIG. 2

